

IN THE CLAIMS:

1. (Amended) A gene delivery vehicle [having been provided with] comprising at least a tissue tropism for cells selected from the group of smooth muscle cells, [and/or] endothelial cells, or smooth muscle cells and epithelial cells.

2. (Amended) A gene delivery vehicle having been deprived of at least a tissue tropism for liver cells.

Please cancel claim 3 without prejudice or disclaimer.

sub c 10 4. (Amended) [A vehicle according to anyone of the claims 1-3,] The gene delivery vehicle of claim 1 wherein said tissue tropism is being provided by a virus capsid.

5. (Amended) [A vehicle according to] The gene delivery vehicle of claim 4, wherein said virus capsid comprises protein fragments from at least two different viruses.

6. (Amended) [A vehicle according to] The gene delivery vehicle of claim 5, wherein at least one of said viruses is an adenovirus.

7. (Amended) [A vehicle according to] The gene delivery vehicle of claim 5 [or claim 6,] wherein at least one of said viruses is an adenovirus of subgroup B.

8. (Amended) [A vehicle according to anyone of the claims 5-7,] The gene delivery vehicle of claim 5 wherein at least one of said protein fragments comprises a tissue tropism determining fragment of a fiber protein derived from a subgroup B adenovirus.

9. (Amended) [A vehicle according to anyone of the] The gene delivery vehicle of claim 7 [or claim 8,] wherein said subgroup B adenovirus is adenovirus 16.

10. (Amended) [A vehicle according to claim 7-9,]The gene delivery vehicle of claim 7 wherein protein fragments not derived from an adenovirus of subgroup B are derived from an adenovirus of subgroup C[, preferably of adenovirus 5].

11. (Amended) [A vehicle according to anyone of the claims 1-10]The gene delivery vehicle of claim 1 further comprising a nucleic acid derived from an adenovirus.

12. (Amended) [A vehicle according to anyone of the claims 1-11,]The gene delivery vehicle of claim further comprising a nucleic acid derived from at least two different adenoviruses.

13. (Amended) [A vehicle according to claim 11 or claim 12,]The gene delivery vehicle of claim 11 wherein said nucleic acid comprises at least one sequence encoding a fiber protein comprising at least a tissue tropism determining fragment of a subgroup B adenovirus fiber protein[, preferably of adenovirus 16].

14. (Amended) [A vehicle according anyone of the claims 10-13,]The gene delivery vehicle of claim 11 wherein said [adenovirus] nucleic acid derived from adenovirus is modified such that the capacity of said adenovirus nucleic acid to replicate in a target cell has been reduced or disabled.

15. (Amended) [A vehicle according to anyone of the claims 11-14,]The gene delivery vehicle of claim 11 wherein said [adenovirus] nucleic acid derived from an adenovirus is modified such that [the capacity of] a host immune [system]system's capacity to mount an immune response against [adenovirus]adenoviral proteins encoded by [said adenovirus]adenoviral nucleic acid has been reduced or disabled.

16. (Amended) [A]The gene delivery vehicle [according to anyone of the claims 1-15,]of claim 1 further comprising a minimal adenovirus vector or an Ad/AAV chimaeric vector.

15. (Amended) [A vehicle according to anyone of the claims 1-16,] The gene delivery vehicle of claim 1 further comprising at least one [non-adenovirus] non-adenoviral nucleic acid.

18. (Amended) [A vehicle according to] The gene delivery vehicle of claim 17 wherein at least one of said [non-adenovirus] non-adenoviral nucleic acids is a gene selected from the group of genes encoding a protein selected from the group consisting of: an apolipoprotein, a nitric oxide synthase, a herpes simplex virus thymidine kinase, an interleukin-3, an interleukin-1 α , an (anti) angiogenesis protein [such as angiostatin], an anti-proliferation protein, a smooth muscle cell anti-migration protein, a vascular endothelial growth factor (VEGF), a basic fibroblast growth factor, a hypoxia inducible factor 1 α (HIF-1 α) [or] and a PAI-1.

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19. (Amended) A cell for [the production of] producing a gene delivery vector [according to anyone of the claims 1-18,] having a tissue tropism for cells selected from the group of cells consisting of smooth muscle cells, endothelial cells, or smooth muscle cells and epithelial cells, said cell comprising means for the assembly of [said] gene delivery vectors wherein said means includes a means for the production of an [adenovirus] adenoviral fiber protein, wherein said adenoviral fiber protein comprises at least a tissue tropism determining fragment of a subgroup B [adenovirus] adenoviral fiber protein.

20. (Amended) [A cell according to] The cell of claim 19, wherein said cell is or is derived from a PER.C6 cell (ECACC deposit number 96022940).

Sub E1
21. (Amended) [The use of a] A pharmaceutical composition comprising the gene delivery vehicle [according to anyone of the claims 1-18 as a pharmaceutical] of claim 1 together with a suitable vehicle.

Please cancel claims 22 and 23 without prejudice or disclaimer.

24. (Amended) An adenovirus capsid [with or provided with] having a tissue tropism for smooth muscle cells and/or endothelial cells wherein said capsid [preferably] comprises proteins from at least two different adenoviruses and wherein at least a tissue tropism determining fragment of a fiber protein is derived from a subgroup B adenovirus[, preferably of adenovirus 16].

25. (Amended) An adenovirus capsid [having been deprived of] lacking a tissue tropism for liver cells wherein said adenovirus capsid [preferably] comprises proteins from at least two different adenoviruses and wherein at least a tissue tropism determining fragment of a fiber protein is derived from a subgroup B adenovirus[, preferably of adenovirus 16].

26. (Amended) [The use of] A method of delivering nucleic acid to cells selected from the group of cells consisting of smooth muscle cells, endothelial cells and both smooth muscle and endothelial cells, said method comprising:
administering to said cells an adenovirus capsid [according to claim 24 and/or claim 25, for the delivery of nucleic acid to smooth muscle cells and/or endothelial cells] comprises proteins from at least two different adenoviruses and wherein at least a tissue tropism determining fragment of a fiber protein is derived from a subgroup B adenovirus.

Please cancel claim 27 without prejudice or disclaimer.

29. (Amended) Construct pBr/AdBamRfib16, comprising adenovirus 5 sequences 21562-31094 and 32794-35938, and further comprising an adenovirus 16 gene encoding fiber protein.

30. (Amended) Construct pBr/AdBamR.pac/fib15, comprising adenovirus 5 sequences 21562-31094 and 32794-35938, [further comprising] an adenovirus 16 gene encoding fiber protein, and [further comprising a unique] a PacI-site in the proximity of the adenovirus 5 right terminal repeat, in the non-adenovirus sequence backbone of said construct.

31. (Amended) Construct pWE/Ad.AfIIIrITRfib16, comprising adenovirus 5 sequences 3534-31094 and 32794-35938[, further comprising] and an adenovirus 16 gene encoding fiber protein.

32. (Amended) Construct pWE/Ad.AfIIIrITRDE2Afib16, comprising adenovirus 5 sequences 3534-22443, 24033-31094 and 32794-35938, and further comprising an adenovirus 16 gene encoding fiber protein.

Please cancel claims 33 through 36 without prejudice or disclaimer.

37. (Amended) [The use of a] A method of depriving an adenovirus capsid of a tissue tropism for liver cells, said method comprising using fiber protein of adenovirus 16 in an adenovirus capsid [for depriving said capsid of a tissue tropism for liver cells] therefor.

Please add the following new claims:

--38. The gene delivery vehicle of claim 2 wherein said tissue tropism is being provided by a virus capsid.

39. The gene delivery vehicle of claim 38, wherein said virus capsid comprises protein fragments from at least two different viruses.

40. The gene delivery vehicle of claim 39, wherein at least one of said viruses is an adenovirus.

41. The gene delivery vehicle of claim 6 wherein at least one of said viruses is an adenovirus of subgroup B.